

**Notes from  
Dark Energy Survey (DES)  
Working Group Meeting (WGM)  
Friday, June 02, 2006  
10:00 – 12:00 AM in the Snake Pit**

*Attending: Paul Philp, Wyatt Merritt, John Peoples, Ed Temple, Dean Hoffer, Brenna Flaughner, Jim Annis, Douglas Tucker, Greg Bock, Bob Tschirhart*

1) Discuss DES Timeline [Ed/Dean]

*We are looking at July 25-27 for Director's Review for CD-1.*

*Wyatt is gone June 14-28.*

*John is gone is June 16-20.*

*There is a HEPAP meeting in Washington on July 6-7. (It is possible that DES may receive a HEPAP endorsement at that meeting.)*

*According to the schedule, we need to submit a draft acquisition strategy to the Fermilab Site Office in June, and, in fact, Paul already has a copy.*

*We are shooting for a 2008 construction start.*

*Paul has done the Preliminary PEP and has a draft acquisition strategy.*

*Status of CDR Preliminary Hazard Analysis Report and PMP(?) – we have received some documentation from Minerva, but have not finished preparing our own versions.*

2) DES Status Progress on All CD-1 Documentation [Wyatt]

a) Conceptual Design Report (CDR)

*There is a new draft of the CDR (v0.5) that has been sent around. Brenna has prepared comments and Jim has sent some material. Still very much in progress. Aim to send something around to collaboration by end of next week.*

b) Baseline Range and Resource Loaded Schedule

*Brenna is working on it.*

c) Preliminary PMP

*Not discussed at today's meeting.*

d) Preliminary Hazard Analysis Report

*Not discussed at today's meeting.*

e) Draft Configuration Management Document

*Not discussed at today's meeting.*

f) Draft Value Management Document

*Not discussed at today's meeting.*

g) Draft Risk Management Plan

*Not discussed at today's meeting.*

h) DOE Documents [Paul]

- Preliminary Project Execution Plan (PPEP)
- Acquisition Strategy (AS)

*Not discussed at today's meeting.*

3) CD-1 Director's Review [Ed]

- a) Date: July 25-27, 2006
- b) Charge

*There have been a few iterations on the Charge.*

*We first discussed the re-redraft, including comments from Mont. Relatively minor changes were recommended here. It was re-iterated that the scope of this review is DECam and not Data Management. It was noted that DECam includes the optics and that, in fact, at the last DES WGM, it was decided that the entire instrument is part of the DECam project.*

*As part of the discussion of the re-redraft of the Charge, there was some discussion regarding the funding profile. Brenna plans to update schedule and funding profile; iterations with Mont are anticipated. She has already been providing some of this information to DOE. A group may need to be formed to provide some guidance to Brenna on the funding profile.*

***Action Item [Brenna/Mont]: Update schedule and funding profile.***

*It was noted that 413 does not require PMP for CD-1, but that the site office and lab do.*

*It was noted that we should really be careful to add the P for Preliminary in these acronyms (PPEP, PPMP...)*

*It was noted that, at a minimum the DECam and FNAL management should be at the review closeout, and that Directors from the other DES oversight laboratories (NCSA and NOAO) should be invited (by Mont) to participate or delegate participation.*

*It was noted that we should add that DES should respond to the recommendations from the BIRP review as well as to the previous Director's Review, and that the reference in the charge to the BIRP review should be made more explicit.*

*We then discussed Attachment 1 of the original draft charge, "Expectations for a Successful CD-1 Review. It was noted that:*

- *For the CDR, the plan is to follow the 413 requirements*
- *The project management team must be enough to get to CD2, but not necessarily beyond (at this stage of the project)*

- *The PMP should be strictly referred to as the PPMP, since FNAL will not unilaterally define the project plan (CTIO/NOAO will also contribute to the project plan).*
- *In general, the terms physics and physicists should be replaced, respectively, by science and scientists.*
- *We should discuss the plan for determining a cost range in upcoming meetings. Some other projects have used (best estimate – best est + contingency) as the range; not clear if this is the best thing to do.*

#### c) Potential Reviewers

*Harland Epps\*, Stephanie Baum\*, Connie Rockosi\*, Jack Baldwin\*, Rich Stanek, Mike Lindgren, Peter Wilson, Dean Hoffer, Steve Kahn\*, Michael Lesser\*, Bob Tschirhart, Paul Mantsch\*, Roger Smith\*, Rich Kron\* (co-chair), Ed Temple (co-chair)*

*\*astronomers/astrophysicists*

*It was noted that sometimes only a 50% chance of getting any given person as a reviewer – so the list of reviewers might undergo some iteration. It was also noted that it is important to have astronomers on the review panel, so if astronomers on the list cannot make it, they should be replaced by other astronomers.*

*During the discussion of potential reviewers, it was noted that the DETF had sent its report to two federal advisory committees, the Astronomy & Astrophysics Advisory Committee (AAAC) and HEPAP. Moreover Rocky Kolb briefed AAAC during its May 12-13 meeting. Rocky also briefed P5 in closed session on April 21 and a DETF member will probably brief HEPAP at its July 6-7 meeting. AAAC may recommend that the R&D for the Stage IV projects such as LSST, SKA, SNAP and other JDEM projects proceed slower than the DETF recommended. There is a possibility that AAAC will recommend that DOE and NSF formally issue separate public solicitations for proposals for Stage III experiments (like DES) before any finding is awarded to proposals that they have already received (like DES). P5 was charged to provide HEPAP with a roadmap for HEP that could include Dark Energy experiments like DES. DES was presented to P5 during its April 20 meeting, along with LSST and SNAP. DOE and NSF program people are developing a strategy to act on stage III proposals. If there is a solicitation the most optimistic outcome would be for DOE to notify DES that it is approved for funding in time to have a further project review shortly after September, which could provide the go-ahead to order the blanks for the corrector lenses. The actual funding level would not be known until the FY2008 President's Budget request is submitted to Congress in February 2007.*

*It was asked whether the DECam project was seeking something from this review to buttress ordering of the blank. The answer is “No”.*

#### d) Agenda

*Mont has given Brenna a copy of NOvA's review agenda as a template. Therein, there is not much emphasis on plenary sessions, but more on breakout sessions.*

*The review is three days. In the current version of the agenda, the first day will be mostly overview talks in the morning and more specific talks in the afternoon; the second day will be mostly breakout sessions, plus executive sessions and opportunities for the review panel to have questions answered; and the third day will be an executive session and closeout.*

*Several suggestions were made for the agenda. In particular, it was suggested that a discussion of the DETF Stage 3 criteria, and esp. a discussion of photometric redshifts, should be included as background information during the review either as separate agenda items or as part of other talks.*

*There was some discussion on the number of breakout sessions to have and what topics to cover. There was also some discussion on how to place the relative positions of executive sessions, breakouts, and question/answer periods in the agenda.*

*Brenna will update the agenda based upon the recommendations given.*

**Action Item [Brenna]: Update agenda and send new version to Ed.**

- e) DES responses to Preliminary Director's Review Recommendations

*Not discussed at today's meeting.*

- 4) Status of Open Action Items from the last meeting: [Brenna/Wyatt]

- a) Ask Nancy Grossman for Minerva PHA as a template. [Wyatt]

**Done.**

- b) Redistribute NOAO MOU and aggressively pursue getting it signed off. [DES/Mont]

**Done.**

- c) Appoint a Project Manager for the DECam project. [Mont]

*Mont is in the process of doing this.*

- d) Send Ed comments on the proposed list of reviewers. [DES]

**Done.**

- e) Review the RLS. [Brenna/Ed/Dean]

*Still to be discussed sometime before the review.*

- f) Meet in about 2 weeks to double-check on readiness for July Dir Review. [DES/OPMO]

*The originally planned meeting did not occur, but general consensus of those attending today's meeting is that we will be ready for the review.*

*The Conceptual Design Report as written is not a full technical description of the project – just a brief description of the project (limited to 50 pages); that said, this should be sufficient for a **conceptual** design review, but not for something beyond. The supporting documents need to be finished, but they need not to be perfect.*

*Should we meet on the 1<sup>st</sup> and 3<sup>rd</sup> Fridays to keep up with this? Conflict with HEPAP, but maybe add ourselves to the HEPAP agenda? (Undecided, but see below for schedule of upcoming DES Working Group Meetings.)*

***To summarize: The project believes that it is ready to go ahead with the review.***

***Action Item [Wyatt/others]: Initial draft of necessary documents (Conceptual Design Report, Preliminary PEP, Preliminary PMP, Preliminary Hazard Analysis Report, ...) needed within the next two weeks.***

- g) (1) Redraft first 2 paragraphs in the charge to be consistent with project deliverables.

***Done.***

- (2) Give Mont and Ed a heads up on the funding needs, so that a funding profile can be constructed. [John, Brenna, Wyatt]

*In progress.*

***Action Item [John, Brenna, Wyatt]: Make sure Mont is aware of the funding needs, so that a funding profile can be constructed.***

- h) Ask Nancy Grossman for the Minerva PEP and Value Management document. [Wyatt]

***Done.***

- i) Decide whether a subset of the group meeting on May 28, based on comments outstanding on the documentation. [Ed/DES]

*No longer applies – the sub-meeting was cancelled.*

- j) Identify a Collaborator to take the lead and work with ES&H on the Preliminary Hazard Analysis Report [DES]

***Done.***

***Next Meetings: Tuesday, June 13, 1PM, Snakepit***

***Friday, June 30, 2PM, Black Hole***

***Friday, July 07, 10AM, Snakepit***

***Friday, July 14, 10AM, Snakepit***

***Tuesday, July 18, 1PM, Black Hole***

***Friday, July 21, 10AM, Snakepit***